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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,842	07/01/2003	David A. Field	GP-302850	2768

7590                    09/01/2006

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[REDACTED] EXAMINER

SUHOL, DMITRY

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

3725

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/611,842	FIELD ET AL.	
	<b>Examiner</b> Dmitry Suhol	<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 June 2006.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Double Patenting***

Claims 7-12 and 14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 11/069173. Although the conflicting claims are not identical, they are not patentably distinct from each other because they only differ in terminology used. For example, the bending element and associated curvature described in application 11/069173 is an obvious variation of a draw die and associated curve extending between a first and second ends.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-6 and 13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 11/069173. The claims application 11/069173 disclose a bending die capable of producing the form as claimed in claims 1-6 of application 10/611842, therefore it would have been obvious to manufacture the claimed form since it would only depend on the needs of the user of the device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 and 7, the limitations of “a curvature decreasing linearly” can’t be determined. It is not clear how a curve decreases in a linear manner since it is not a line.

The remainder of the claims are considered as best understood.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Zatti '087. Zatti discloses a bending die (16) containing all of the claimed elements including, a curve extending between first and second ends where the portion of the curve is a circular arc with a transition portion (being clothoid) extending from the arc toward the second end with a linearly (as best understood) decreasing curvature (figure 1). Regarding claims 10-12, the curve subtending an angle of 90, greater than 90 or less than 90, as required by claims 10-12 respectively, it is considered that Zatti encompasses all of the above limitations since the angle measurement would only depend upon the distance a pipe to be bent travels along the curved portion (as shown in figure 1). Regarding limitations of claim 14, lacking any clear distinguishing structural features it is considered that Zatti encompasses the limitation since his transition portion as defined by the examiner (see previous office action) depends from the adjacent curve portion and thus has the same curvature (at least at the start).

Should Zatti be later deemed not to meet claims 7-12 because Zatti does not disclose a curvature decreasing linearly from the curvature of the circular arc to the zero curvature of a straight tube, it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention to have manufactured the device of Zatti with such dimensions since Zatti clearly states that his bending die may encompass any desired shape including a circular, spiral, egg, oval shaped or any other desired shape and such shapes would only depend on the use of the tube member.

Claims 7-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanseau et al '248. Sanseau discloses a bending die containing all of the claimed elements including, a curve extending between first and second ends where the portion of the curve is a circular arc with a transition portion (being clothoid) extending from the arc toward the second end with a linearly (as best understood) decreasing curvature (figures 3 and 4, where the ends are considered to be portions A and B shown in figure 4). The limitations of claim 9 are shown in figure 4. Regarding claims 10-12, the curve subtending an angle of 90, greater than 90 or less than 90, as required by claims 10-12 respectively, it is considered that Sanseau encompasses all of the above limitations since the angle measurement would only depend upon the distance a pipe to be bent travels along the curved portion. Regarding limitations of claim 14, lacking any clear distinguishing structural features it is considered that Sanseau encompasses the limitation since his transition portion as defined by the examiner (see previous office action) depends from the adjacent curve portion and thus has the same curvature (at least at the start).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3725

Claims 1-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zatti '087 or Sanseau et al '248. Since the dies of Zatti and Sanseau contain all of the claimed features of the die they are considered to be capable of manufacturing a tube structure of claims 1-6 and therefore it would have been obvious to one with ordinary skill in the art, at the time of the claimed invention, to have manufactured a tube/pipe structure as claimed in claims 1-6 and 13 since it would only depend upon the desired structure to be achieved and since the dies of Zatti and Sanseau are clearly capable of manufacturing the above structure.

#### ***Response to Arguments***

Applicant's arguments filed 6/6/06 have been fully considered but they are not persuasive. Applicants argue that the references of Zatti and Sanseau do not disclose all of the claimed features. Specifically, applicants argue that Zatti does not teach "curvature decreasing linearly" nor that Zatti is intended for tubes but rather flat metal objects. In response the examiner points out that the limitation of a linearly decreasing curvature is not clear and as best understood Zatti teaches such a relationship since his curvature decreases in a linear manner as shown in figure 1. The examiner further points out that absent any clear distinguishing features the die of Zatti can most certainly be used to bend tubes (note: a mandrel is not being claimed nor any other structure which would prevent Zatti from being used to bend a tube).

With respect to Sanseau, the reference also discloses the claimed invention in that the circular arc portion is clearly [A] [C] [B] as segment between points A and Ma,

while a transition portion with linearly decreasing curvature (as best understood) is shown as curved portion 8.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dmitry Suhol  
Primary Examiner  
Art Unit 3725

ds

Application/Control Number: 10/611,842

Art Unit: 3725

Page 8